

Claims

1. (Currently amended) A parts washer ~~characterised by~~ comprising:
a cleaning chamber;
a receptacle into which parts to be cleaned are placed, the receptacle being rotatably mounted within the cleaning chamber;
a receptacle drive ~~means~~device arranged to rotate the receptacle; and
~~one or more~~at least one spray ~~manifolds~~manifold, the ~~or each~~at least one spray manifold having a plurality of spray jets arranged to spray cleaning fluid onto the parts in the receptacle ;
wherein the ~~or each~~at least one spray manifold is moveably mounted within the cleaning chamber and is coupled to a spray manifold drive ~~means~~device such that the spray manifold drive ~~means~~device causes reciprocating motion of the ~~or each~~at least one of the spray manifold.
2. (Currently amended) A parts washer in accordance with claim 1, characterised in that the at least one spray ~~manifolds~~comprisemanifold comprises at least one horizontal spray manifold arranged to undergo reciprocal horizontal movement and to spray cleaning fluid in a generally vertical direction and at least one vertical spray manifold arranged to undergo reciprocal vertical motion and to spray cleaning fluid in a generally horizontal direction.
3. (Original) A parts washer in accordance with claim 2, characterised in that there is provided a first horizontal spray manifold located above the receptacle having spray jets directed downwardly toward the receptacle and a second horizontal spray manifold located below the receptacle having spray jets directed upwardly toward the receptacle.
4. (Original) A parts washer in accordance with claim 3, characterised in that the first and second horizontal spray manifolds are connected adjacent first ends thereof to an interconnecting manifold arranged to extend generally vertically between the first and second horizontal spray manifolds.
5. (Currently amended) A parts washer in accordance with claim 4, characterised in that the interconnecting manifold is engaged by the spray manifold drive ~~means~~device so that the interconnecting manifold undergoes rotational reciprocal motion about a longitudinal axis of the

interconnecting manifold, thereby causing the first and second horizontal spray manifolds to undergo pivotal reciprocal motion in a generally horizontal plane.

6. (Currently amended) A parts washer in accordance with claim 2, characterised in that a vertical spray manifold is provided, the vertical spray manifold being engaged by the spray manifold drive ~~means~~device such that the vertical spray manifold undergoes reciprocal linear movement along a vertical axis.

7. (Currently amended) A parts washer in accordance with ~~any one of claims 1 to 6~~claim 1, characterised in that each of the spray jets sprays a solid, non-diverging stream of cleaning fluid.

8. (Original) A parts washer in accordance with claim 7, characterised in that the spray jets on each of the spray manifold are directed to spray at varying angles in a single plane.

9. (Currently amended) A parts washer in accordance with ~~any one of claims 2 to 8~~claim 2, characterised in that the or each horizontal spray manifolds is provided with a plurality of spray jets at an outer end thereof.

10. (Currently amended) A parts washer in accordance with ~~any one of claims 2 to 9~~claim 2, wherein the ~~or each vertical~~at least one spray manifold is provided with a plurality of spray jets at an upper end thereof and a plurality of spray jets at a lower end thereof.

11. (Currently amended) A parts washer in accordance with ~~any one of the preceding claims~~claim 1, characterised in that the spray manifold drive ~~means~~device and receptacle drive ~~means~~device are arranged such that after a single revolution of the receptacle, the at least one spray ~~manifolds~~manifold will have undergone a plurality of reciprocal movements and be in a position offset from the position of the at least one spray ~~manifolds~~manifold at the commencement of said revolution.

12. (Currently amended) A parts washer in accordance with ~~any claims 4 to 11~~claim 4, characterised in that the spray manifold drive ~~means~~device comprises a motor arranged to drive a drive wheel and a first cam member is provided connected between the drive wheel and the interconnecting manifold such that the rotation of the drive wheel causes the interconnecting manifold to undergo said rotational reciprocal motion.

13. (Original) A parts washer in accordance with claim 12, characterised in that an inlet manifold is provided, the inlet manifold being arranged generally vertically and being connected to and in fluid communication with the interconnecting manifold, the first cam member being connected between the drive wheel and the inlet manifold.

14. (Original) A parts washer in accordance with claim 13, characterised in that the first cam member comprises a cam plate having a slot adjacent a first end to engage with an off-centre lug on the drive wheel and being connected at a second end thereof to the inlet manifold.

15. (Currently amended) A parts washer in accordance with claim 13-~~or~~ 14, characterised in that a U-shaped pipe is provided, the U-shaped pipe being rotatably connected between an elbow on the inlet manifold and an elbow on the vertical spray manifold such that the U-shaped pipe extends generally horizontally at ends thereof and a second cam member being provided connecting between the drive wheel and the U-shaped pipe adjacent the inlet manifold such that rotation of the drive wheel causes the U-shaped pipe adjacent the inlet manifold to undergo reciprocal rotational movement about the longitudinal axis of U-shaped pipe adjacent the inlet manifold.

16. (Original) A parts washer in accordance with claim 15, characterised in that the second cam member comprises a cam rod connected at a first end thereof to the off centre lug on the drive wheel and pivotally at a second end thereof to a first transverse bracket on the U-shaped pipe adjacent the inlet manifold.

17. (Original) A parts washer in accordance with claim 16 wherein a first interconnecting member is provided, the first interconnecting member being pivotally connected

between a second transverse bracket on the U-shaped pipe adjacent the inlet manifold and a third transverse bracket on the U-shaped pipe adjacent the vertical spray manifold such that rotation of the drive wheel causes the vertical spray manifold to undergo vertical linear reciprocal movement along the longitudinal axis of the vertical spray manifold.

18. (Currently amended) A parts washer in accordance with ~~any one of claims 4 to~~ claim 17, characterised in that a second interconnecting member is provided, the second interconnecting member being pivotally connected between a fourth transverse bracket on the interconnecting manifold and a fifth transverse bracket on the vertical spray manifold, such that the rotational reciprocal motion of the interconnecting manifold causes rotational reciprocal motion of the vertical spray manifold about the longitudinal axis of the vertical spray manifold.

19. (Currently amended) A parts washer in accordance with ~~any one of the preceding claims~~ claim 1, characterised in that the cleaning chamber comprises a cabinet having a lid moveable between an open position and a closed position.

20. (Currently amended) A parts washer in accordance with ~~any one of the preceding claims~~ claim 1, characterised in that the receptacle comprises a basket mounted on a central drive shaft.